

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3 (Cancelled)

4 (New). A method for preparation of a tip for scanning probe microscopy comprising attaching to said tip a transition metal chalcogenide nanotube having a length of greater than 0.5 microns.

5 (New). A method in accordance with claim 4, wherein the length of said transition metal chalcogenide nanotube is up to about 20 microns.

6. (New). A method in accordance with claim 4, wherein the length of said transition metal chalcogenide nanotube is at least 1 micron.

7 (New). A method in accordance with claim 4, wherein the length of said transition metal chalcogenide nanotube is 1-20 microns.

8. (New). A method in accordance with claim 4, wherein the length of said transition metal chalcogenide nanotube is 10-20 microns.

9 (New). A method in accordance with claim 4, wherein the said transition metal chalcogenide is WS_2 .

10 (New). A tip in accordance with claim 4, wherein the said transition metal chalcogenide is WSe_2 .

11 (New). A method in accordance with claim 4, wherein the said transition metal chalcogenide is MoS_2 .

12 (New). A method in accordance with claim 4, wherein the said transition metal chalcogenide is MoSe_2 .

13 (New). A tip for scanning probe microscopy having attached thereto a transition metal chalcogenide nanotube having a length of greater than 0.5 microns.

14 (New). A tip in accordance with claim 11, wherein the length of said transition metal chalcogenide nanotube is up to about 20 microns.

15 (New). A tip in accordance with claim 11, wherein the length of said transition metal chalcogenide nanotube is at least 1 micron.

16 (New). A tip in accordance with claim 11, wherein the length of said transition metal chalcogenide nanotube is 1-20 microns.

17. (New). A tip in accordance with claim 11, wherein the length of said transition metal chalcogenide nanotube is 10-20 microns.

18 (New). A tip in accordance with claim 11, wherein the said transition metal chalcogenide is WS_2 .

19 (New). A tip in accordance with claim 11, wherein the said transition metal chalcogenide is WSe_2 .

20 (New). A tip in accordance with claim 11, wherein the said transition metal chalcogenide is MoS_2 .

21 (New). A tip in accordance with claim 11, wherein the said transition metal chalcogenide is MoSe_2 .